

REMARKS

By the above amendment, the specification has been amended at page 10 to utilize language corresponding to that presented in the claims. More particularly, the main unit 101 is described as a sample processing apparatus for processing a sample in the form of a semiconductor wafer in at least one processing chamber thereof. That is, the present invention is described at a semiconductor manufacturing apparatus in which semiconductor wafers or processed or manufactured with which the last paragraph at page 15 of the specification provides that the screen of the remote monitor software is composed of an image view 201 of the main unit 101 and the image view 201 of the semiconductor manufacturing apparatus displays the state of each processing chamber, for example, the presence or the absence of the wafer of each kind of process being executed. Thus, applicants submit that the specification and drawings provide clear support for the subject matter disclosed and claimed. As such, the objection to the specification as failing to provide proper antecedent basis for the claimed subject matter as well as the rejection of claims 1 - 4 under 35 USC 112, first paragraph, as failing to comply with the written description requirement, are traversed insofar as they are applicable to the present specification and claims, as amended, with applicants submitting that by the present amendment such objection and rejection should now be overcome.

Additionally, by the present amendment, claims 1 - 4 have been canceled and new claims corresponding thereto have been presented in which independent claims 5 and 9 recite a sample processing apparatus and the structural features thereof noting that the sample processing apparatus includes the arrangement as illustrated in Figure 1 of the drawings of this application, for example.

Turning to new independent claim 5, as recited therein, the sample processing apparatus includes a main unit which comprises at least one processing chamber in which a sample is disposed and processed, represented by the main unit 101 of Fig. 1, for example, a recording device which records information of an operation in the main unit as predetermined data which information includes a plurality of data corresponding to signals which are output from the main unit during the operation which recording device is represented by the terminal 104 as shown in Fig. 1, for example, and a display means in the form of the remote diagnosing terminal 107 as illustrated in Fig. 1, for example, which simultaneously displays both information about an abnormality which occurred during the operation and at least one information selected by a user corresponding to one of the predetermined data, as described in relation to Fig. 2 of the drawings, for example. Thus, with this structural arrangement, a user can easily recognize the condition of the apparatus and cause of an abnormality after it has occurred, by clearly grasping the operational information of the apparatus in processing of the sample after the processing thereof, especially operating conditions of the apparatus when the abnormality occurred, so as to enable improvement in operation. That is, in the prior art, for determining the condition of the apparatus and cause of an abnormality for the user, after an abnormality has occurred, it has been difficult to correctly determine in a short time. Since it is difficult to recognize the occurrence of the abnormality. For example, by restarting the apparatus there may occur an increase in damage or an operational condition which is different from that present at the time of occurrence of the abnormality. In accordance with the present invention, it becomes possible for the user to select operational information of the apparatus displayed on the display together with information concerning the abnormality so that the user can determine

correct measures to be taken in a short time period utilizing the information which the operation of the apparatus is recorded.

Applicants note that in an apparatus for processing a sample, such as a semiconductor wafer, operation of each of the parts of the apparatus are mutually correlated, and therefore, even in the event a single abnormality occurs, such may be caused not only directly by an abnormality in the part with the abnormality has occurred, but also the operation of other parts may be effected. In this manner, a plurality of operations might be effected by a single abnormality. By the present invention, the user in order to properly judge the condition of the apparatus or cause of the abnormality, the user must necessarily clearly recognize the mutual effects of operation of the apparatus and the present invention enables the information concerning the operation at the occurrence of the abnormality to be displayed together with data or information regarding the operation of other portions so as to obtain information concerning the relation wherein the problem of the abnormality can be grasped and proper measures taken in a short time. Applicants submit that such features as recited in independent claims 5 and 9 and the dependent claims are not disclosed or taught in the cited art as will become clear from the following discussion.

The rejection of claims 1 and 2 under 35 USC 102(b) as being anticipated by Yoshida et al (US Patent 4,964,734) and the rejection of claims 3 and 4 under 35 USC 103(a) as being unpatentable over JP (JP 10-021079) cited art by the applicant (in view of Yoshida), such rejections are traversed insofar as they are applicable to the present claims and reconsideration and withdrawal of the rejections are respectfully requested.

As to the requirement to support a rejection under 35 USC 102, reference is made to the decision of In re Robertson, 49 USPQ 2d 1949 (Fed. Cir. 1999), wherein the court pointed out that anticipation under 35 U.S.C. §102 requires that each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. As noted by the court, if the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if the element is "inherent" in its disclosure. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Moreover, the court pointed out that inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

With regard to the requirements to support a rejection under 35 USC 103, reference made to the decision of In re Fine, 5 USPQ 2d 1596 (Fed. Cir. 1988), wherein the court pointed out that the PTO has the burden under '103 to establish a prima facie case of obviousness and can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. As noted by the court, whether a particular combination might be "obvious to try" is not a legitimate test of patentability and obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. As further noted by the court, one cannot use hindsight reconstruction to pick and

choose among isolated disclosures in the prior art to deprecate the claimed invention.

Furthermore, such requirements have been clarified in the recent decision of In re Lee, 61 USPQ 2d 1430 (Fed. Cir. 2002) wherein the court in reversing an obviousness rejection indicated that deficiencies of the cited references cannot be remedied with conclusions about what is "basic knowledge" or "common knowledge". The court pointed out:

The Examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is immaterial to patentability, and could not be resolved on subjected belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher."... Thus, the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion. (emphasis added)

Turning first to Yoshida et al, while the Examiner contends that this patent in Fig. 1 shows and discloses a main unit 20, and a sample container 5, a recording/display means 17, and a plurality of sensors (part of 7), applicants note that Yoshida et al is directed to a moisture content measuring system for measuring the moisture content of coal, for example. As described in the paragraph bridging columns 4 and 5 of Yoshida et al, coal which is picked in the sample container 5 has the weight thereof measured and a signal representing a variation of the wave of the sample caused by drying is sent via the converter 14 to the calculator 15 whereby a moisture content value changing moment by moment is indicated by the digital

indicator 16 and the results of measurement are transmitted to the display-recorder 17 in a boiler operating room. Thus, the recording device and display device 17 only displays a moisture content value. Applicants submit that even assuming arguendo, that Yoshida et al may be considered to represent a main unit and a recording device, although applicants submit that Yoshida et al does not provide such features, it is readily apparent that Yoshida et al in the sense of 35 USC 102 or 35 USC 103 does not disclose the feature of a display means for simultaneously displaying both information about an abnormality which occurred during the operation and at least one information selected by user corresponding to one of the predetermined data as recited in claim 5, or a display means for displaying an information about an abnormality which occurred during the operation and at least one information selected by a user corresponding to one of the plurality of data in portions of the predetermined period. Applicants submit that Yoshida et al provides no disclosure concerning display of information about an abnormality which occurred during the operation and further, does not provide a display of such information together with a user selected information as recited in independent claims 5 and 9 and the dependent claims thereof. In this regard, dependent claims 6 and 10 recite the feature that the information of the operation in the unit includes at least one of time series data, and the display means displays the information about the abnormality and the information selected by the user in synchronism. Hereagain, such features are not disclosed or taught by Yoshida et al in the sense of 35 USC 102 or 35 USC 103 and the independent and dependent claims patentably distinguish thereover and should be considered allowable at this time.

As to the combination of Yoshida et al with JP 10-021079 (Watanabe), Watanabe is directed to the provision of retrieving a message of an interference result from a storage means representing a suggested cause of an abnormality and displaying such message. That is, Watanabe, as described in the specification of this application only discloses a structure by which a diagnosis result is displayed and which obtained by way of a knowledge rule within a range which is obtained by

the user beforehand and Watanabe does not disclose or teach user selective display of data concerning the operation of the apparatus corresponding to recorded information after occurrence of an abnormality nor to display selected operational information together with the information of the abnormality. That is, Watanabe only discloses an alarm and its inferred cause and the recited features concerning the display means as recited in independent claims 5 and 9 and the dependent claims are not disclosed or taught by Watanabe in the sense of 35 USC 103 and such deficiencies are not overcome by Yoshida et al as pointed out above. Thus, applicants submit that the proposed combination fails to provide the claimed features as now set forth in independent claims 5 and 9 and the dependent claims thereof such that all claims patentably distinguish over the cited art in the sense of 35 USC 103 and should be considered allowable thereover.

As to the dependent claims, such claims recite further features which, when considered in conjunction with the parent claims further patentably distinguish over the cited art such that applicants submit that the dependent claims recite additional features which are not disclosed or taught in the cited art and should be considered allowable with the parent claims.

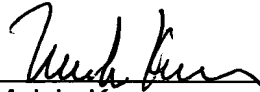
In view of the above amendments and remarks, applicants submit that all claims present in this application should now be in condition for allowance and issuance of an action of a favorable nature is courteously solicited.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli,

Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 500.41300CX1),
and please credit any excess fees to such deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

A handwritten signature in dark ink, appearing to read 'Melvin Kraus', is written over a horizontal line.

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